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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/773,172	01/31/2001	Mark E. Epstein	6169-212	6092

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EXAMINER

SMITS, TALIVALDIS IVARS

ART UNIT PAPER NUMBER

2654

DATE MAILED: 05/27/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

SG

## Office Action Summary

Application No. <b>09/773,172</b>	Applicant(s) <b>Mark Edward Epstein</b>
Examiner <b>Talivaldis Ivars Smits</b>	Art Unit <b>2654</b>

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

1)  Responsive to communication(s) filed on \_\_\_\_\_

2a)  This action is **FINAL**. 2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

### Disposition of Claims

4)  Claim(s) 1-25 is/are pending in the application.

4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-25 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on Jan 31, 2001 is/are a)  accepted or b)  objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)  The proposed drawing correction filed on \_\_\_\_\_ is: a)  approved b)  disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.

12)  The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

13)  Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)  All b)  Some\* c)  None of:

1.  Certified copies of the priority documents have been received.
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

14)  Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a)  The translation of the foreign language provisional application has been received.

15)  Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

1)  Notice of References Cited (PTO-892) 4)  Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_

2)  Notice of Draftsperson's Patent Drawing Review (PTO-948) 5)  Notice of Informal Patent Application (PTO-152)

3)  Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 6)  Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in-
  - (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
  - (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

2. Claims 1-4, 7-15, 18-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Luc Van Tichelen *et al.* (U.S. Patent 6,311,159, filed October 5, 1999).

Van Tichelen teaches a speech layer converting DTMF tones into representative text-based codes, inherently first determining one or more prosodic characteristics of said DTMF signal, as well as Automatic Speech Recognition converting speech into text for data input (col. 1, lines 60-67 and col. 3, lines 1-7), as well as “converting, with a natural language understanding module inherently providing contextual feedback, text messages from the speech layer into representative semantic meaning messages” (col. 3, lines 12-16).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gerardo Chaves (U.S. Patent 6,510,414, filed October 5, 1999) in view of Luc Van Tichelen *et al.*.

As per claims 1-4, 7-15, 18-24, this being an alternative rejection thereof, Chaves teaches determining whether an audio input signal is a dual tone multi-frequency (DTMF) signal or human speech and converting them to equivalent text, necessarily first determining one or more prosodic characteristics of said DTMF signal (col. 2, lines 32-40 and col. 4, line 66 through col. 5, line 4).

However, Chaves does not teach providing the equivalent text to a natural language understanding (NLU) system to determine its meaning. However, Van Tichelen, in addition to teaching a speech layer converting DTMF tones into representative text-based codes as well as Automatic Speech Recognition for data input (col. 1, lines 60-67 and col. 3, lines 1-7), as well as “converting, with a natural language understanding module, text messages from the speech layer into representative semantic meaning messages”, said NLU module necessarily providing contextual feedback (col. 3, lines 12-16)..

As per claimss 5, 16, and 25, Chaves suggests automatically collating the input text from spoken utterances and equivalent text from DTMF input into the appropriate data fields (col. 3, lines 63-67).

Claims 6 and 17 recite the same or similar limitations as claims 1-4, 7-15, 18-24, above, and thus are rejected for the same reasons.

***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. James Ehlinger (U.S. Patent Application Publication 2001/0012350, filed March 11, 1998, page 1, paragraph 0007) and Kary K. Burns (U.S. Patent Application Publication 2002/0071545, filed December 12, 2000, page 3, paragraph 0029) teach entering input commands as either speech or DTMF tones.

6. **Any response to this action should be mailed to:**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450  
(non-fee Amendments should be directed to: Mail Stop Non-Fee)

**or FAXed to:**

(703) 872-9314 (please label *formal* communications  
“OFFICIAL”; please label *informal* or draft communications,  
“PROPOSED” or “DRAFT”)

Hand-delivered responses should be brought to Crystal Park 2, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to the examiner, Talivaldis Ivars Smits, whose telephone number is (703) 306-3011. The examiner can normally be reached Mondays-Fridays from 8:30 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold, can be reached on (703) 305-4379. The facsimile phone number for Technology Center 2600 is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center 2600 customer service, whose telephone number is (703) 306-0377.



TALIVALDIS IVARS SMITS  
PRIMARY EXAMINER

Art Unit 2654  
May 22, 2003